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TRADE IN SERVICES BETWEEN BRAZIL AND THE EUROPEAN COMMUNITY

Empirical Trends and Preliminary Hypotheses on Determinants

by

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I. INTRODUCTION

Compared to merchandise trade, trade in services is still a widely unexplored issue, conceptually as well as empirically.

In conceptual terms, there is no solid theoretical body on the determinants of international trade in "invisibles". While factor proportions theory has been found to offer useful insights into the determinants of international competitiveness in services related to merchandise trade [Sapir/Lutz, 1981], there are more difficulties in explaining newly emerging business services. Banking, data transmission, and non-merchandise insurance range among those services which are more difficult to subsume under the Heckscher-Ohlin-Samuelson type of theory or Ricardian theory of resource availability.

Second, typologies proposed to separate factor income from non-factor services and foreign direct investment in service industries are heavily disputed among scholars. Borderline cases are numerous and give rise to controversies about definitions. In fact, definitions have been shown to matter significantly as far as the amount of traded services relative to merchandise trade is concerned [e.g. Grubel, 1987; Nusbaumer, 1987, chapter 4; Rugman, 1987; Rugman/Yeung, 1989; Ramstetter/Lee, 1989; Arndt, 1989].

Thirdly, the data base is small and often inconsistent, in many cases even non-existent if the level of bilateral trade relations is approached. In general, three avenues of empirical analysis are

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accessible: through national accounts and input-output tables, through sectoral surveys and through the balance of payments [e.g. Flores, 1990]. Yet, only the latter avenue is open to analyses of bilateral trade flows and it is only the BoP approach which allows for comparisons with merchandise trade flows. Sectoral surveys such as those recently published by the OECD [OECD, 1989] or those on Brazilian transborder data flows by the UNCTC (Transborder Data Flows and Brazil, 1984) fail to report flows of payments and receipts between partner countries. At best they document volumes of transactions which lead to flows of payments. Yet, sectoral surveys become indispensable if policy determinants and specific conditions on markets are discussed and tested. As a result, balance of payments records are the only sources to analyse bilateral trade flows in services statistically. They are used in the following as far as national Central Banks were able and prepared to release such information.

Chapter II traces the importance of services in Brazilian total trade as it is highlighted in the published records of the Brazilian Central Bank. The Bank does not publish bilateral or regional balance of payments.

Chapter III provides an overview of trends in merchandise trade between the Community and Brazil. This is seen to be important as the development of merchandise is strongly correlated to trade-related services such as transport and merchandise insurance.

Chapter IV introduces more detailed evidence on bilateral payments and receipts based on service trade between three EC member countries (West Germany, France, and the Netherlands). The Central Banks of these countries provide (mostly unpublished) information on service trade with Brazil - albeit at a very uneven level of disaggregation - and are important trading partners of Brazil within the Community.

Chapter V introduces an indirect way of assessing trends in trade-in services between the Community and Brazil, that is the pattern and the development in EC foreign direct investment in

Brazil. Even if one does not follow the suggestion that investment income should be subsumed under trade flows of services, it goes without saying that investment in services and service-related activities (such as service-intensive manufactures) from EC home countries in Brazil will stimulate flows of business services (communication, banking) as well as consumer services (hotels, travels) in the same direction. In addition, should Brazil prove to be competitive as a host country for foreign investment, at least parts of such investment will be outward-looking and strengthen Brazil's role as an exporter of services.

Chapter VI discusses the relevance of the major institutional framework for bilateral trade in services between the Community and non-member countries, that is the EC-1992 program. The core of the program is in liberalising intra-Community trade in services and thus will change relative prices between domestically supplied and imported services. It will also have a large impact upon institutional and quantitative barriers to access as the Community will come closer to common external policies vis-à-vis imports from non-member countries in important service sectors like shipping and air transport.

Chapter VII presents some hypotheses on determinants of bilateral trade flows which should be specified and tested in an analytical follow-up of this fact-finding paper provided that the data base could be improved.

Chapter VIII concludes on the results.

II. THE ROLE OF SERVICES IN BRAZILIAN TOTAL TRADE

The Brazilian Central Bank publishes the IMF standard accounts of major services in its balance of payments comprising travel, transport, merchandise trade-related insurance, and other non-factor services. In addition, private factor services capital income (profits, dividends, and interest) are displayed.

Bilateral or regional balance of payments are not published. The only available Brazilian study on the role of services in the balance of payments is thus not disaggregated by countries or regions [Fundaçao Centro de Estudios do Comercio Exterior, 1982].

Table 1 provides an overview of the period 1975-1988 (which is the latest year available). The breakdown indicates that

- since 1975 Brazil has always been a net importer of non-factor services (NFS). Contrary to its expected net import position in factor services (FS), Brazil as a net NFS importer deviates from the position of many developing countries. For instance, during the mid-eighties developing countries as a group achieved surpluses in NFS trade with the US, Japan, and West Germany [Langhammer, 1989, tables 1, 2, and A2]. The same holds true for Latin American countries' trade (including Caribbean "tax heaven" economies) with the US and West Germany.

- Brazilian receipts from exporting NFS have grown much less rapidly than merchandise exports. By 1988, the share of NFS exports in total exports (NFS plus merchandise exports) amounted to 5.1 per cent only. It stagnated over the eighties and was lower than the mid-seventies share (6.7 per cent). Obviously, NFS exports though being partly related to merchandise trade did not keep up with the extraordinary growth of Brazilian merchandise exports over the entire period.

  Again, this is an unexpected result if it is compared with rapid growth of developing countries' service exports during the last decade, especially in East and Southeast Asia [Castle/Findlay, 1988].

- compared to the group of developing countries, Brazil in the eighties has remained an almost pure merchandise exporter. In 1980, the contribution of NFS exports to total exports was by 2 percentage points lower in Brazil than in all developing coun-

Table 1 - Brazilian Trade in Services, 1975-1988 (in Mill. US$)

	1975		1980		1983		1985		1987		1988	
	Receipts	Payments	Receipts	Payments	Receipts	Payments	Receipts	Payments	Receipts	Payments	Receipts	Payments
Merchandise Trade	8669.0	12210.3	20132.4	22955.2	21899.3	15428.9	25639.0	13153.5	26255.1	15051.9	33789.4	14605.3
Non-factor services	623.8	1982.6	1125.3	3479.9	1242.0	2699.3	1625.5	2423.7	1470.4	2770.5	1813.3	3419.3
Travel	71.2	421.2	125.9	367.1	39.2	431.2	65.8	441.3	101.8	285.6	117.0	705.5
Transport	474.8	1423.0	813.6	2749.6	1106.1	2018.5	1465.8	1774.2	1308.7	2086.9	1317.9	2358.5
Freight	285.6	451.8	623.8	587.7	747.5	352.5	844.6	390.0	749.0	566.6	847.8	590.8
Others	189.2	971.2	189.8	2161.9	358.6	1666.0	621.2	1384.2	559.7	1520.3	470.1	1767.1
Insurance	54.4	52.2	137.6	52.1	39.3	81.7	46.2	125.7	28.0	241.6	336.7	199.4
Other non-factor services	23.4	86.2	48.2	311.1	57.4	167.9	47.7	82.5	31.9	156.4	41.7	155.9
Memo:												
Private factor services of which												
Capital income	366.9	2099.6	1380.0	8412.1	712.1	11720.1	1658.8	12917.5	558.3	10877.0	761.4	12845.9
Profits, divided	2.2	236.9	234.1	543.9	4.3	762.1	79.6	1136.1	31.3	940.7	2.5	1541.1
Interest	364.7	1862.7	1145.9	7457.0	707.8	10263.2	1579.2	11238.6	527.0	9319.2	758.9	10590.8
Other private factor services	374.7	410.9	580.0	1233.2	432.2	1271.1	47.7	82.5	434.2	1206.6	409.9	1264.8

Source: Banco Central do Brasil, Boletim Mensal, monthly issues.

tries [for all developing countries see Sapir, 1985, table 2]. This gap seems to have widened since that time.

- travel and passenger transport (the latter listed under "other transport") has lagged behind the importance of this sector in other developing countries' export earnings. Brazil is not yet a major tourist resort again compared to those developing countries which are geographically close to OECD net importers' of "sun-intensive" services as Southeast Asia to Japan, the Mediterranean countries to Europe, or Central America and the Caribbean to the US. Yet, it is questionable that remoteness factors play the major role in explaining flows of tourist services. Rapidly increasing export earnings from travel and tourism between Southeast Asia and Europe suggest other factors to be at least as important as distance.

- the results for freight services differ from other NFS in the way that since 1980 Brazil has enjoyed a trade surplus which runs parallel to its merchandise trade surplus. To explain this in detail would go beyond the scope of this paper. Yet, explanations should consider the strict bilateralism in the Brazilian shipping policies since the end of the sixties [Böhme, 1972 and 1989], the existence of cargo sharing principles, the discrimination of cross traders (third parties), as well as the demand for freight services coming from large public companies like Petrobras and Siderbras. Such companies can effectively prevent new competitors from challenging domestic shipping companies. Reportedly, the degree of bilateralism in Brazilian shipping policy has declined in the eighties but the country still operates a large fleet privileged by demand from domestic public enterprises.

Together with Korea, Brazil is the only major developing country which shows a significant surplus in freight. This is said to be also due to its preference to time-charter and to lease vessels rather than to import shipping services. This practice has the effect of artificially reducing freight figures, because charter operations are recorded by the IMF under "other transport" [OECD, 1989, p. 73].

- The amount of other NFS exports under which modern business services such as financial services are subsumed (provided they are reported) has remained small in Brazil. In 1988, they accounted for less than 3 per cent of total NFS exports. Other developing countries display much larger shares. Yet, Brazil does not host important financial agglomerations. Nor does it seem to have been an open market for information software and networks. To cite the UNCTAD study on transborder data flows in Brazil, the country's policies have led to the increased location of computers, software, data bases, and to more extensive national control over them. As a result of Brazil's policy, transborder-data-flow links are not being used to export information resources and do not increase the country's international economic and political vulnerability [UNCTC, Transborder Data Flows..., 1984, p. 192]. Such a policy designed to regulate access to the information market is probably not consistent with a policy which would facilitate the international "entrée" of Brazilian suppliers of information services.

III. TRENDS IN MERCHANDISE TRADE BETWEEN BRAZIL AND THE COMMUNITY: POSSIBLE IMPLICATIONS FOR TRADE IN SERVICES

Trends in merchandise trade between Brazil and the Community mirror a general trend in trade relations between Latin America and the EC: The share of the Latin American countries in EC exports and imports has been declining over two decades. For EC exports this decline was in the range of 8 to 5 per cent in the 1973-1988 period (for imports 8 to 6 per cent). On the other hand, the EC went down from 26 to 19 per cent in Latin American exports [23 to 18 in Latin American imports; for more details see Eurostat, EC-Latin American Trade 1979-1987, 1989a].

Of course, Brazil as the most important single entity in Latin American trade is not delinked from the Latin American trends. Table 2 yields that Brazilian exports to the Community suffered from a sizable decline over 15 years in relative terms. This happened mainly because Brazilian exporters of non-traditional manufactures

Table 2 - Share of the EC-12 in Brazilian Exports and Imports, 1972-1987

	Exports				Imports
	Primary commodities	Semi-manufactures	Manufactures	Total	Total
1972	43.2	46.5	26.3	39.5	32.9
1975	41.7	24.4	19.4	33.2	26.0
1978	46.6	22.9	19.3	32.8	19.5
1980	44.3	24.5	18.6	30.3	16.4
1982	40.9	29.2	20.3	29.5	13.2
1984	44.0	19.0	16.0	25.5	14.1
1985	48.0	24.8	15.0	27.2	14.2
1987	41.5	24.0	19.2	26.7	21.2

Source: See Table 1. Anuario Estatístico do Brasil, annual issues.

- the most dynamic sub-sector - did not find their way to the European market but engaged themselves increasingly in the US market, apart from the traditional stronghold of Brazilian exports, the neighbouring countries. The share of the EC in Brazilian imports does not exhibit much better results even if the impact of fuels upon the Brazilian import bill is taken into account.

Such "slow go" in Brazil-EC merchandise trade has two major implications for trade in merchandise trade-related services.

First, in terms of pure volumes of trade, Brazilian exporters of services will follow the different regional dynamics of merchandise trade, that is more transport services "exported" to the main export markets, the US and ALADI countries, than to the Community. There will be an even stronger correlation between the dynamics of merchandise trade-related services and merchandise trade if bilateral cargo sharing rules are applied and if cross traders are discriminated against. Thus, EC suppliers of transport services or of merchandise insurance are unlikely to penetrate into trades between Brazil and the US or within Latin America.

Second, and more importantly, there is a structural component to the detriment of Brazil-EC trade in services, especially business services. It is widely acknowledged that manufactures are more service-intensive than commodities, and it is just in the manufacturing sector where the growth of Brazilian exports to the EC (in relative terms) was continuously lower than growth of Brazilian world manufactured exports (in annual rates: 10.5 compared to 13.6 per cent). As a result, it must be feared that there is not much demand for services like export-import financing, fairs, patents and licences, leasing, telecommunication, business travel, and after-sales services if manufactured trade grows below a minimum threshold level necessary to generate business services. The latter may happen because of technical indivisibilities in providing services (lump sum services) related to manufactured exports.

IV. SERVICE TRADE BETWEEN EC MEMBER COUNTRIES AND BRAZIL. THREE CASE STUDIES OF WEST GERMANY, FRANCE, AND THE NETHERLANDS

Periodically, the Statistical Office of the European Communities (Eurostat) initiates studies on EC trade in services. Unfortunately, the only disaggregation in these studies refers to the US, Japan, OECD countries, developing countries, and former socialist countries and thus cannot be used for our purposes [Schaumburg-Müller, 1985; Eurostat, 1989b; Benassi, 1990].

Their main result being relevant for the Brazil-EC trade as a reference is that the Community had a growing deficit in transport and travel with non-OPEC and non-ACP developing countries. Brazil belongs to this group. This deficit was almost matched by a surplus in other NFS. In total, the Community became a net importer of NFS by the mid-eighties [Eurostat, 1989b, pp. 140-142]. The share of EC NFS imports from this group of developing countries in total imports (merchandise plus NFS) amounted to more than 21 per cent in 1986 compared to 19 per cent in 1979. Thus, it is much higher than the share of NFS exports in Brazilian exports and suggests a strong position of Asian service exporters.

Bilateral balances of payments with countries apart from the US and Japan are thus available on the national level only. Two Central Banks provided such information for the purpose of this study (West Germany, the Netherlands) and the French Central Bank publishes such data since 1980.

The three countries are representative in two respects. First, they are important traders of services within the Community. In 1988 France kept the first rank, West Germany the third and the Netherlands the fifth rank as EC exporters of NFS to non-member countries (the second, first and fifth rank in imports, respectively). Together they accounted for 44 per cent of extra-EC NFS exports and 52 per cent of imports in 1988.

Second, they are among the largest EC trading partners of Brazil. Preliminary figures for 1989 suggest that 52 per cent of Brazilian exports to the Community were directed to the three countries (including the entrepôt role of the Netherlands) while 63 per cent of Brazilian imports from the Community originated from West Germany, France, and the Netherlands [Banco Central do Brasil, Boletim Mensal, July 1990, p. 106].

Brazilian Trade in Services with West Germany

West Germany keeps a special role as a trading partner to Brazil. The country is the most important source of EC-originating goods for Brazil and it hosts the largest part of West German foreign direct investment outside the OECD: in 1988, 56 per cent of the West German stock of FDI in manufacturing, 12 per cent of FDI in service industries and 40 per cent in total investment in developing countries (including newly industrialised economies) was located in Brazil (see Table 10 below). Such a concentration is without a rival in other OECD countries and is expected to create appropriate incentives for trade in services. Table 3 provides a breakdown of payments and receipts due to services traded between Brazilian and German residents and reported to the Central Bank.

Table 3 - West German Balance of Payments in Goods and Services with Brazil, 1971-1989 (in Mill. DM)

	West German exports (credits)							West German imports (debits)						
	1971	1975	1980	1986	1987	1988	1989	1971	1975	1980	1986	1987	1988	1989
Merchandise	1456	2946	2844	2759	2667	2710	n.a.	1112	2211	3366	4397	3994	4952	n.a.
Non-factor services	282	482	662	641	626	501	579	330	512	629	718	704	510	548
of which														
Travel	28	39	62	69	55	66	67	16	39	54	92	102	109	100
Total transport	118	279	323	321	347	270	310	162	228	317	431	379	153	170
of which														
Freight	58	151	159	211	253	165	183	122	149	209	277	250	9	34
Passenger transport	30	46	74	82	66	77	99	19	40	52	93	81	89	84
Port services	23	68	73	26	27	27	27	21	39	55	58	44	47	50
Repairs	7	14	17	2	0	0	0							
Other transport	-	-	-	-	-	-	-	1	0	2	3	4	8	2
Insurance	4	9	8	10	11	9	8	11	8	11	16	17	39	12
Other private services	132	155	269	241	213	156	194	141	237	247	179	206	209	266
of which														
Fees, advertising, fairs	10	6	43	44	33	36	41	84	155	115	85	100	77	108
Licences, patents	71	69	10	10	8	13	12	0	0	1	1	5	2	1
Wages and salaries received from or paid to non-residentals[a]	7	23	65	27	31	21	27	13	21	31	34	46	61	61
Construction, assembly	34	29	41	88	62	15	29	25	7	9	7	8	7	8
Overhead costs	3	7	11	9	11	8	7	3	8	50	16	9	10	19
Repayments, discounts, liability payments	2	6	7	7	9	7	11	12	21	15	15	19	26	27
Miscellaneous	4	15	91	57	58	55	68	3	24	26	21	18	26	42
Total	1738	3438	3506	3400	3293	3211	n.a.	1442	2723	3995	5118	4698	5462	n.a.
Memo:														
Factor services	73	133	366	1114	866	1208	1569	38	128	52	50	35	51	38
of which														
Income from:														
Direct investment	25	33	-94	236	140	452	746	5	3	4	15	-2	13	-9
Portfolio investment	4	3	86	106	79	67	18	2	2	11	6	6	7	9
Interests on loans	31	66	312	358	323	357	341	31	121	37	28	31	32	38
Other revenues	0	0	0	3	3	6	24	0	0	0	1	0	0	0
Public capital income	14	31	62	412	320	326	440	-	0	0	-	-	0	-

[a]Excluding guestworkers.

Source: Unpublished data provided by the Deutsche Bundesbank.

Four observations deserve attention:

- The net position in NFS has almost been in equilibrium over the entire period. This is surprising as West Germany usually is a clear net importer of NFS no matter which partner country is chosen.

- Brazilian exports of NFS have been far less dynamic than merchandise exports. This is indicated by the declining share of NFS in total West German imports from Brazil from more than 20 per cent at the beginning of the seventies to less than 10 per cent in 1988.

  Even in absolute terms there has been stagnation of many service exports over years. Though some figures are extremely volatile and thus escape from a serious assessment, the general trend is characterised by stagnation. Travel shows some increase but as mentioned above Brazil has not become a tourist resort like Southeast Asia, the Mediterranean or the Caribbean. Business services listed mainly under "other private services" did not go beyond the level which was already achieved by the mid-seventies. Again this deviates from the overall pattern which show business services to be the most rapidly growing industries even in some segments of South-North exports.

- Low growth of Brazilian imports of services from West Germany coincides with stagnating merchandise imports from West Germany. As a result, the share of West German NFS exports in total exports to Brazil remained at a level of 15-19 per cent during the seventies and eighties. This share is normal in the sense that it can be observed for total West German imports from all developing countries [Langhammer, 1989, table A2].

- Understandably, factor services exhibit a rising Brazilian deficit because of the debt service and earnings from West German investment.

Overall, NFS trade between Brazil and West Germany is very likely to reflect the serious internal economic problems of Brazil. Brazil has squeezed its imports stabilised its net foreign exchange position in merchandise trade but seemingly not in NFS trade. Finally, a general decline in bilateral economic relations between the two countries has responded to the instability of the Brazilian economic performance. As will be shown below, this decline is also reflected in flows of FDI.

Brazilian Trade in Services with France

The Eurostat studies yield that France is the leading EC exporter of NFS in trade with non-EC member countries. While this position may underrate the role of the UK as a major exporter of non-measurable financial services, it nevertheless underlines a strong competitive position of French engineering companies in large turn-key projects such as subways, airports, and dams. Blueprint studies as well as administrative and operational guidance in such projects are services for which there is demand in developing countries which are characterised by both a domestic market potential and lack of own human capital. Seemingly, Brazil is such a country. Table 4 indicates that

- France has enjoyed a permanent surplus in NFS trade with Brazil during the eighties;

- the share of NFS in French total exports to Brazil is overproportionately large (about 20 per cent);

- apart from transport, France gained sizable export earnings in its domain of services in operation and exploration of large single infrastructure projects. The lump sum nature of such services is revealed by the volatility of annual figures which peaked in 1983/84. It would be the task of sectoral studies to identify the underlying projects in detail;

- Brazilian NFS exports which predominantly based on transport services are more important and more dynamic (in terms of shares in total exports) in trade with France than in trade with West Germany;

Table 4 - French Balance of Payments in Goods and Services with Brazil, 1980-1988 (in Mill. FF)

	French exports (credits)									French imports (debits)								
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1980	1981	1982	1983	1984	1985	1986	1987	1988
Merchandise[a]	4580	6269	6906	4879	4981	4759	4715	4510	4812	3777	6057	5177	5637	5098	6457	5415	4319	5383
Non-factor services	520	805	1159	1246	1210	1119	1206	921	1122	252	501	690	614	564	651	571	471	763
of which																		
Travel	41	47	55	46	53	42	45	50	50	17	42	54	22	24	32	25	42	51
Merchandise trade-related services	46	95	123	168	167	130	140	22	25	44	113	167	109	59	39	71	56	129
Maritime transport	56	52	45	85	35	54	65	68	48	35	35	43	51	89	62	58	26	57
Other transport	44	114	139	138	149	222	189	162	294	50	212	277	259	233	241	255	223	265
Insurance	78	62	65	50	77	58	93	110	83	3	5	9	5	4	13	13	7	63
Costs of operation[b]																		
Costs of exploration	152	234	441	21	33	94	60	139	48	36	10	32	33	12	63	7	24	32
Consultants' studies				484	446	306	383	131	254				23	9	85	44	9	37
Maintenance, repairs	n.a.	n.a.	n.a.	1	0	0	0	0	5	n.a.	n.a.	n.a.	1	4	4	0	0	2
Patents, licenses	2	52	20	17	14	13	6	11	7	2	4	5	4	5	4	4	2	6
Overhead costs	n.a.	n.a.	n.a.	3	5	16	1	1	39	n.a.	n.a.	n.a.	14	8	8	11	5	2
Wages, salaries[c]	37	45	45	52	54	65	72	84	100	26	30	33	32	38	33	31	31	46
Other services	66	104	226	181	177	119	152	143	169	39	54	70	61	79	67	52	46	73
Memo:																		
Private capital income	594	1126	1522	1735	2333	2670	1964	2275	2957	37	229	139	168	477	387	122	106	458

[a]Including trade on third account (mainly commodity trade). - [b]Receipts and payments arising from port services, operation of dams and other large construction sites and infrastructure projects: 1980-1982 including consultants studies. - [c]Excluding guestworkers.

Source: Ministère de l'Economie, des Finances et du Budget, Direction du Trésor. La Balance des Paiements de la France, Rapport Annuel, Annexes, 1980-1988.

- there was little success in expanding Brazilian service exports to France outside travel and transport.

To compare the Brazilian NFS trade performance in the West German and French market to the performance of all trading partners and all developing countries in the same markets, respectively, Table 5 exhibits the corresponding trade shares. The results are mixed. Compared to 1980, the 1988 shares show a loss of the Brazilian position in the West German market from 0.7 to 0.5 per cent in West German world NFS imports and - more distinctly - in West German NFS imports from developing countries (5.0 to 3.8 per cent). The main reason behind this decline is the weak Brazilian performance in the travel and tourism market which was the most dynamic NFS export industry of developing countries in the 1980s. Asian countries gained remarkable trade shares in these two service industries.

Table 5 - Share of Brazil in French and West German Exports and Imports of Non-Factor Services to (from) the World and Developing Countries, 1980 and 1988 (in per cent)

	World		Developing Countries	
	1980	1988	1980	1988
France				
Exports	0.4	0.4	1.0	1.5
Imports	0.2	0.3	0.8	1.0
West Germany				
Exports	1.1	0.7	5.6	5.0
Imports	0.7	0.5	5.0	3.8

Source: See Tables 3 and 4.

At a much lower level, the Brazilian performance on the French market was slightly better than on the West German market. This seems to be due to the fact that travel and tourism is not yet a major growth industry in France as it is in West Germany. Given the situation that the per capita income level in France is more than 10 per cent lower than in West Germany and that the consumer preferences are still less travel-biased in France than in West Germany, import demand for consumer services is likely to expand more rapidly in France in a near future. Brazil as a country which is rich of natural resources could tap into growth industries such as ecological services provided that prerequisites in infrastructure and security are met.

As far as Brazil as an export market for French and West German NFS is concerned, shares declined for West Germany parallel to the general slowdown of economic relations between the two countries in the eighties. They slightly increased as far as French exports to developing countries were concerned, - again from a very low level - probably because of few turn-key projects.

In total, however, trade in NFS between the two countries and Brazil has clearly missed a promising track of rapid growth as it could be observed in trade with other developing areas.

Dutch Trade in Services with Brazil

Data on Dutch bilateral NFS trade are highly aggregated and thus do not give much scope for detailed interpretation. The most outstanding result is that the Netherlands enjoyed a clear trade surplus. In addition, Table 6 supports two observations made for Brazilian trade with West Germany and France too, particularly that

- trade flows have not been dynamic in the eighties but overall stagnated with some volatility in some years.

- Dutch NFS imports accounted but for a very small percentage of total imports from Brazil (about 2 per cent of Dutch imports). On

Table 6 - Trade in Services Between the Netherlands and Brazil (in Mill. Guilders)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dutch exports of services										
Transport	86	85	53	37	49	74	79	46	53	82
Travel non-residents	1	1	2	2	1	1	1	2	1	1
Trade agencies, building and contracting, research, etc.	13	20	18	20	27	18	13	13	12	16
Other private services	2	2	1	1	5	2	2	4	4	7
Public services	2	3	3	3	3	3	2	2	2	1
Total exports of services	103	111	77	63	85	98	97	67	72	108
Dutch imports of services										
Transport	14	9	13	18	18	6	14	16	11	14
Travel residents	1	2	1	1	1	1	1	1	1	1
Trade agencies, building and contracting, research, etc.	8	8	10	9	10	7	9	10	8	12
Other private services	1	1	1	1	2	-5	2	1	2	2
Public services	2	3	3	2	2	3	2	3	3	5
Total imports of services	27	24	29	31	33	12	29	32	26	34
Balance on services										
Transport	72	76	40	19	31	68	65	29	42	68
Travel	-0	-1	1	1	0	-0	0	1	0	-0
Trade agencies, building and contracting, research, etc.	5	11	8	11	17	11	4	3	3	4
Other private services	0	1	-0	1	4	7	-0	3	2	5
Public services	-0	0	-0	1	0	-0	-0	-1	-1	-3
Total balance on services	76	87	48	32	52	86	68	36	46	74

Source: Unpublished data provided by the Nederlandsche Bank.

the other hand, however, the Netherlands as a traditionally strong exporter of transport and trading services owed a much larger part of their total earnings from exporting to Brazil to non-factor services (about 15 per cent in 1988)[1].

The common feature of all three country data sets is that of stagnation on the NFS export side of Brazil. In interpreting such a result, due account should be taken of large nominal depreciations of the Brazilian currency vis-à-vis the European currencies. It is likely that in local currency growth of NFS exports would have been more impressive. Yet, the same should then hold for merchandise exports so that the share of NFS in total Brazilian exports would be more explicative. Table 1, however, yielded that this share ranged between 5-6 per cent only and did not rise. This shows that slow growth of NFS trade is not a special phenomenon in bilateral trade between the Community and Brazil but is likely to appear also in trade with the dollar area as the largest trading partner and as the anchor region for the Brazilian exchange rate regime.

Evidently, Brazil did not follow the trend of many developing countries in the eighties, that is to penetrate into tradable consumer service industries not to speak of business services. It would be the task of a policy paper to identify the main domestic barriers against the emergence of internationally competitive service industries.

A first hint towards such barriers could be the trend in inflows in foreign direct investment in general and in service industries in particular. Should such inflows have declined in the past, a major stimulus to trade in services would have been lost.

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1 Merchandise trade figures were not delivered by the Central Bank. They were taken from Eurostat and should be interpreted with caution on the import side because of the discrepancies between domestic imports and entrepôt trade.

V. THE COMPANION PIECE TO TRADE IN SERVICES: FLOWS OF FOREIGN DIRECT INVESTMENT FROM THE COMMUNITY TO BRAZIL

The Brazilian Central Bank publishes data on FDI in Brazil on the basis of registered investment denominated in US$. The development of EC shares in total FDI in Brazil shows a striking parallel to the development of the US exchange rate against the EC currencies. Between 1980 and 1984 when the European currencies depreciated, the share of EC FDI in total registered FDI fell from 33.6. per cent to 30.0 whereas in the period 1985-1989 when the currencies appreciated the share recovered from 31.8. per cent to 36.2 per cent [Banco Central, Boletim Mensal, January 1988 and July 1990]. Given the fact that the Brazilian currency more or less followed the trend of the dollar against the European currencies, exchange rate effects may have influenced changes in shares.

However, even if exchange rate changes would be left out of consideration, the Brazilian data would be insufficient to answer how Brazil performed relative to other possible hosts in competition for private risk capital.

Tables 7-9 document stock data for West German and UK FDI in Brazil and flow data for French investment. Each of the data report realised investment figures.

In general, only the West German and UK data allow for meaningful information. The French FDI in Brazilian service industries seems volatile, quantitatively small and confined to the banking sector. Both British and West German stock data yield that investment in service industries expanded rapidly in a single jump in the mid-eighties but afterwards did not show any expansion. In terms of shares in total investment they remained far below investment in manufacturing. This observation coincides with the general decline of Brazil as a host country for OECD investment in the eighties and the much more modest role of Brazil as a host for service industries compared to manufacturing. Table 10 displays Brazil's share in investment stocks of four OECD countries in the developing world. On the EC side UK and West German investors expanded investment in

Table 7 - West German Foreign Direct Investment in Brazil, 1980-1988 (in Mill. DM) by Year-End (Stock Data)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	5627.0	6929.7	7991.0	7326.5	8688.2	8201.0	8424.2	8537.0	8997.0
Mining	-84.6	-60.3	17.0	57.3	17.1	120.0	155.4	141.0	n.a.
Manufacturing	5409.1	6686.4	7615.0	6684.5	8042.6	7485.0	7637.5	7842.0	7989.0
of which:									
Chemicals	962.1	1307.5	1577.0	1610.1	1814.3	1684.0	1706.2	1591.0	1639.0
Iron, steel	568.0	741.1	817.0	546.6	674.5	626.0	660.5	604.0	583.0
Machinery	732.9	972.1	1173.0	916.4	1064.2	968.0	1005.0	927.0	901.0
Transport, transport equipment	1884.6	2176.9	2277.0	2074.1	2560.7	2123.0	2239.3	2939.0	3196.0
Electrical machinery	831.3	948.4	1145.0	1009.3	1136.9	1194.0	1260.3	1172.0	1017.0
Total services	(302.5)	(303.6)	(359.0)	(584.7)	(628.5)	(596.0)	(631.3)	(554.0)	n.a.
of which:									
Commerce	69.9	58.0	71.0	19.4	199.4	218.0	208.3	168.0	191.0
Banking[a]	(149.9)	(171.1)	(195.0)	(494.8)	(336.4)	(295.0)	(304.2)	(264.0)	n.a.
Holdings	82.7	74.5	93.0	70.5	92.7	83.0	118.8	122.0	48.0

a Figures in brackets are not disclosed because of being confidential; they have been derived by deducting sub-totals from totals.

Source: Unpublished data provided by the Deutsche Bundesbank.

Table 8 - French Net Foreign Direct Investment in Brazil Annual Flows for Selected Years and Sectors (in Mill. FF)

	1981	1985	1986	1987	1988
Energy	83	0	2	48	3
Manufacturing	154	23	180	-37	182
of which:					
Food	61	15	35	2	21
Ferrous and non-ferrous metals	66	0	0	-61	13
Non-metallic minerals	0	0	0	0	20
Chemicals	21	17	12	12	83
Data processing machines, precision instruments	0	0	74	0	22
Services	211	55	8	-110	130
of which:					
Hotels, lodging	0	12	7	0	0
Banking	164	53	1	-127	126
Commerce, repairs	21	2	3	2	2
Miscellaneous	31	50	3	16	-7
Total	479	128	193	-83	308

(- = net outflow of French investment out of Brazil).

Source: See Table 4.

Table 9 - UK Direct Investment in Brazil, 1978-1987 (in Mill. £)[a]

	1978	1981	1984	1987
Metal manufacture	*	*	-	-
Chemicals	80.2	42.4	28.0	57.0
Mechanical engineering	20.1	16.0	13.0	12.0
Electrical engineering	17.3	1.3	*	-
Transport equipment	2.3	*	*	-
Food, drink, tobacco	*	*	*	-
Paper	*	*	37.0	19.0
Other manufacture	28.7	8.2	52.0	106.0
Total manufacture	577.0	331.8	395.0	445.0
Agriculture	-	*	*	*
Energy	-	4.3	*	*
Construction	*	*	*	*
Distribution	11.4	48.2	94.0	132.0
Transport	13.9	*	15.0	15.0
Financial services	*	*	90.0	95.0
Other Services	2.0	14.7	43.0	1.0
Total non-manufacture	33.4	89.4	607.0	760.0
Grand total	610.4	421.1	1002.0	1205.0

[a]Book values of net assets at year-end.

*Data not disclosed because of being confidential. Figures for 1978 and 1981 exclude oil companies, banks and insurance companies.

Source: Central Statistical Office, Business Monitor, Census of Overseas Assets, Mo4, 1978, 1981, 1984, 1987.

Table 10 - Share of Brazil in Four OECD Countries' FDI in Developing Countries by Sectors, 1976-1988

	Manufacturing	Non-manufacturing	All industries
		Japan	
1976	27.4	11.8	17.1
1980	22.8	10.3	15.1
1984	23.2	6.1	11.7
1988	19.1	3.9	7.9
		United States	
1976	32.2	10.0	18.8
1980	29.1	6.9	14.3
1984	35.9	8.4	18.7
1988	36.1	5.6	15.4
		United Kingdom	
1978	27.6	2.0	16.1
1981	12.5	2.5	6.8
1984	11.5	5.8	7.2
1987	12.0	7.4	8.7
		West Germany	
1981	60.6	3.3	37.4
1985	60.8	7.9	38.4
1988	55.8	12.2	39.8

Source: See Tables 1 and 9. - US, Department of Commerce, Survey of Current Business, Monthly. Japan, Ministry of Finance.

service industries relative to other host countries in the developing world but this increase started from a low level and was partly offset by a relative decline as a host for manufacturing investment. What is surprising is the drastic decline of investment in non-manufacturing from Japan and the US which comprises commodities but also service industries, again measured in comparison to other developing countries. The latest period 1984 to 1988 reveals such a loss for total investment from these two very important trading partners.

Related to service trade, stagnation or even decline as a host for investment indicates more difficult preconditions for NFS trade than before. Intra-firm trade may be an important source of NFS trade. Yet, also for nonparty-related trade FDI either in commodities, service-intensive manufacturing or service industries themselves is accepted to have been most stimulating to NFS trade [Dunning, 1989; Sauvant, 1989].

In this respect, during the late eighties Brazil has lost in ground not only against traditional service exporters like Singapore, Hong Kong and the Caribbean island states but also to newcomers in consumer services like Indonesia, Thailand and Malaysia.

To put it briefly, until the end of the eighties, the Brazilian service industry was not yet able to find an equivalent to its leading role as an exporter of manufactures. In 1988, Brazil was the second largest exporter to the EC under the Generalised System of Preferences and almost at the same level as China (13.2 per cent of total GSP-receiving exports to the EC). As an exporter of NFS an equivalent share would be below half of this share as Table 5 has suggested.

VI. DETERMINANTS OF BILATERAL NFS TRADE FLOWS: PRELIMINARY HYPOTHESES

Gravity models designed to explain bilateral trade flows in merchandise trade usually combine non-policy and policy-oriented supply and demand factors as exogenous variables and add stimulus and friction factors. Income level, income growth and skill availability of the exporting economy are usually taken as non-policy supply factors while income level, income similarity and growth rates of the importing country capture the demand factors. Policy variables on the demand side are exchange rate stability and the avoidance of real appreciation, respectively, while the level of import protection is a policy factor on the demand side. Stimulus variables are special institutionalised relations between two trading partners and geographical proximity, while friction variables can comprise geographical remoteness and cultural differences.

Applied to the Brazil-EC case and NFS trade, it is principally possible to sketch some of the determining factors in an admittedly crude way. For instance, one would probably identify consumer services such as tourism to be income-elastic as well as cross price-elastic if prices in tourist resorts which compete with Brazil could be included. Such elasticity estimates could be of some relevance in the EC-Brazil context. The overall price for tourist services is mainly influenced by prices for non-tradables such as wages. Should wages increase drastically in a tourist region competing with Brazil so that the currency would appreciate in real terms, Brazil could benefit. One of these competing regions may be Spain and Portugal. In both countries prices for tourist services have risen in recent years, so that prices of tourist activities in Brazil declined in relative terms. Furthermore, cultural affinity could also be of importance in NFS trade between Portugal and Brazil.

With respect to the non-policy factors on the supply side, similar arguments can be used as for merchandise trade. By nature of its domestic market size, Brazil's economy is inward-looking. Services like wholesale and retail trade, banking, insurance, construction, and transport are tailored to the needs and the income level of the domestic market. So is FDI which for years was attracted by the size (and the protection) of the domestic market. Under such conditions, NFS trade is unlikely to spread beyond merchandise trade-related services like transport and merchandise insurance. Consumer services like tourism in remote parts of the country face problems of distance (and costs of bridging the distance), infrastructure bottlenecks, and language barriers.

Policy-oriented factors on the supply side are important in special industries in which the Brazilian government seemingly took a restrictive stance towards opening the domestic market to international competition. In maritime shipping, the cargo sharing principles handled on a strictly bilateral basis and the restrictions applied to cross traders were already mentioned. In advertising, multinational firms are reported to be limited in their activities by policy regulations. This is said to explain why in 1985 only three of the twelve largest US/UK agencies range among the top ten companies operating in Brazil while in the other Latin American countries between five and eight companies were among the top ten. The top five in Brazil were local companies [Noyelle/Dutka, 1988, pp. 102-103].

Another important example for restrictive policies is the informatics sector. In 1984, an informatics law was enacted. The law provided for a reserved market exclusively for Brazilian entrepreneurs for an eight-year period, for mini- and micro computers and for a system of controlling electronic information goods and service imports over that same period. Thus, infant-industry protection does not only apply to hardware but to services as well. Under the 1984 law, commercial information processing outside Brazil is prohibited, except in special cases. All international information transmissions have to be channelled through a checkpoint, in order to identify their nature and destination. Any enterprise providing access to information banks in the country or abroad should be wholly nationally-owned, and should seek to make the arrangements for access to international data-banks directly with the owners of those banks.

Transnational corporations that process their data abroad have to duplicate, in Brazil, the data-banks drawn on [de Mateo, 1989, pp. 115]. It goes without saying that under such conditions the volume of trade is small and access of foreign investors to specific service industries is limited. Furthermore, Brazil runs the risk of losing the link to technological innovations and to growing markets.

Restrictive policies in individual service industries have been translated in the past into a generally restrictive stance of the Brazilian government in the Uruguay Round as far as the liberalisation of services is concerned. Together with India, Brazil took the firm position to postpone the introduction of this issue into the GATT Round until pending decisions on old tariff and nontariff barriers imposed by the OECD countries were taken [see de Paiva Abreu, 1988, p. 99].

Policy-determined factors on the demand side could be bilaterally institutionalised relations which do not exist in the Brazil-EC context. The major impact of EC policies refers to liberalisation of intra-EC in services under the EC-1992 program and to common policies in some services against non-member countries. This bundle of policies is expected to be similar for many non-member countries. It will be summarised in the following for sectors like tourism, maritime shipping, air transport and banking without special reference to Brazil. Given the factor endowment of Brazil and the spread of such services in the domestic market, the four industries are very likely to be among the core industries of export interest to Brazil.

VII. THE POSSIBLE IMPACT OF EC 1992 UPON SERVICE INDUSTRIES OF EXPORT INTEREST TO BRAZIL

How non-member countries will be affected by common policies in services is still very difficult to forecast because many decisions were not yet taken by the end of 1990 and because "classical" concepts like trade creation/trade diversion cannot be empirically applied because of lack of data [Secchi/Guglielmetti, 1985]. Yet, this static approach derived from the customs union theory is helpful at least to structure some possible effects in specific industries.

Tourism

Apart from dynamic investment-induced effects three static effects are likely, that is internal trade creation, external trade creation, and trade diversion.

Trade could be created internally, if stronger competition among tourist agencies operating under the home country principle (with minimum consumer protection agreed upon) would tend to lower prices. Instead of spending vacation in the home country, neighbouring EC member countries could become attractive. In addition, under such a scenario tourism in the EC would also gain relative to tourism outside Europe (trade diversion). Trade diversion would also be fuelled if a common transport policy would privilege local suppliers against non-member suppliers such as airlines (e.g. through granting privileged access to favourable slots and landings rights to EC carriers only).

Yet, there are three policy measures which can have a balancing effect on prices, that is shift prices upwards. First, a fuel tax is still under discussion. Tax would be imposed on intra-EC shipping and - according to studies commissioned by interested parties like KLM and North Sea Ferries - would raise costs for cruise tours and ferry links by up to 30 per cent. Second, after harmonisation of indirect taxes (either ex post by applying the country-of-origin principle or by harmonising taxes ex ante through the bureaucrats) and after the removal of traveller allowances duty-free shops become obsolete. This is looked upon as a serious loss for airport companies and shipping lines and could lead to shifts of the tax burden to EC consumers. Thirdly, transport between EC member states will become domestic transport and thus subject to the VAT. Today, inter-EC country transport is still exempted from the VAT. Should such factors become relevant, there could be external trade creation, that means that consumer would increasingly chose non-EC tourist resorts.

It is a priori impossible to assess how relevant changing relative prices are in the Brazil-EC context. With respect to third countries, neighbouring countries in the same climate belt (North African countries, Turkey) seem to be more affected by changing relative prices in the tourist industry than remote areas like Brazil. In addition, supply factors like infrastructure may matter more than demand factors which do not show a clear tendency towards price increases or decreases.

Maritime Shipping

Among the transport sub-sectors which are relevant for non-member countries, maritime shipping is the one in which a common policy has already materialised through a package of regulations introduced in late 1986. These regulations comprised the application of competition rules (Arts. 85 and 86 EEC Treaty) to maritime shipping (and also to air transport), the principle of freedom to provide services in international transport and to erode the difference between domestic transport (cabotage) and intra-EC trade, and finally the right to prosecute "unfair" pricing practices (e.g. because of subsidisation of state-owned or private shipping companies) against non-EC companies. The latter regulation has been applied already against a Korean shipping company which had underbidding EC suppliers' freight rates in trade between Europe and Australia. There is no evidence available to check the relevance of this "unfair"pricing regulation for Brazilian shipping companies. Should it be applied, a trade diverting effect could be expected.

Air Transport

How VARIG, the Brazilian flag carrier, will be affected by liberalisation of route access and tarification among EC carriers, will largely depend on concentration processes and mergers between EC based carriers. Such processes may not only encompass special activities like catering, electronic reservation systems, pooled ground services but may also lead to the foundation of common companies operating on special routes. If competition policies would be restrictive in the sense that mergers and acquisitions would not be allowed on a large scale, VARIG might see little room for fears. Under such conditions, extensive bilateralism dealing with landing rights and slots in each individual EC member country would still prevail for a certain time. Yet, should concentration processes continue to be accepted, as recently in France, and if a smaller number of mega-carriers would act concertedly in negotiations for future traffic rights with non-EC carriers, VARIG and other non-EC based carriers might have reasons to be concerned about limited gateways.

Further problems could arise for VARIG if the Commission would tighten up minimum environmental standards for traffic noise and the emission of exhaust gas. As the Brazilian carrier does not run a brand-new fleet, a costly upgrading could become necessary which would erode part of advantages due to low labour costs.

Banking

In the banking sector, Brazilian banks operating in the EC will be treated differently according to whether they are subsidiaries of their home bank or only branches. Under Art. 58 of the Rome Treaty European subsidiaries of foreign companies are treated as home companies of the country in which they are established. Existing subsidiaries have full freedom to operate in the open EC market whereas branches as well as new Brazilian banks seeking a licence after 1992 would have to apply to the Commission. The Commission would examine this application from the reciprocity angle, that is whether European banks had the same access or "mutual advantage" in Brazil. Thus, Brazilian banks already operating in the EC should, therefore, review and adjust their legal status accordingly. It is in this sector where the EC has fixed a reciprocity clause which will come into operation after 1992 at the latest. Then, clearances to establish branches/subsidiaries in the EC will no longer be granted by the regulators in the home countries but by the Commission.

To what extent such regulations and a number of others in banking and other financial services (e.g. "owned fund" regulation, rules on supervision, and control of market risks) are relevant for Brazil goes beyond the scope of this paper. This question warrants a detailed sector analysis. Such an analysis should not neglect that Luxembourg and London as the leading financial service centres may incur some losses as attractive hosts of foreign banks because of EC-wide liberalisation. As a number of Brazilian banks preferably operate in these centres, after 1992 new EC hosts may be under consideration in the headquarters of Brazilian banks. Such reorientation could have some effects on trade in financial services between individual EC member countries and Brazil. For the time being, however, trade in such services still escapes from empirical analyses though concepts to measure it do exist [see Arndt, 1986].

VIII. CONCLUSION AND OUTLOOK

To assess bilateral trade flows in services is still a thorny task, regardless of which pairs of trading partners are taken. So are trials to model bilateral trade either in a partial equilibrium framework or in a computable general equilibrium setting [e.g. proposed in the Brazil-EC framework by Flores, 1990]. An essential element of any model explaining bilateral trade flows is the distinction between policy-determined factors and other supply and demand variables. In Chapter VII some factors were introduced which seem to be relevant in the Brazil-EC context, particularly a restrictive policy of the Brazilian government against opening the local service market, and on the EC side the EC-1992 program. Beyond modelling EC-Brazil trade, there remains the crucial issue of empirical verification or falsification of hypotheses. As was shown in the paper, the data base is modest to say the least. A Community-wide source does not exist, and the few national sources which could be made available offer little more than the standard IMF accounts. Specific surveys can complement balance of payments statistics especially as far as the policy background and volumes of transactions are concerned. Yet, as a common numeraire for all services is missing, sector surveys are mostly incompatible. As a result, they are no substitute to the BoP surveys. This impression is suggested by the few sector-specific studies on the Brazilian informatics industry.

The sketchy statistical evidence, however, allows for one major conclusion: Brazil is not yet an important trader of services, neither in consumer services nor in business services. Given the resource endowment of the country, there is much more scope for supplying consumer services in the short run provided that the infrastructure can be improved. A large number of services is still linked to merchandise trade and thus the import demand for services shrinks if merchandise imports are squeezed to meet the debt service. On the export side, services did not keep up with the speed of merchandise exports though one could have expected a similar expansion of transport services, for instance. Why merchandise trade-related services did not expand faster, warrants a closer look.

The regional breakdown of Brazilian NFS trade outside the EC could not be detected. Thus, statements as those of de Paiva Abreu [1988, p. 98] that in 1983 about 60 per cent of Brazilian exports of "other private NFS" (excluding travel, transport, and insurance) were made to the US and that Middle East countries became increasingly important as export markets could not be verified. It is reported that the Brazilian Central Bank collects detailed sectoral and country-wide statistics on Brazilian trade in NFS but does not release them. To make such statistics available, would be most helpful to clarify the true volumes and values of Brazilian NFS trade.

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